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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,600	11/20/2001	Khai Pham	19903.0002	8932

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EXAMINER

GODDARD, BRIAN D

ART UNIT	PAPER NUMBER
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2171

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DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/988,600

Applicant(s)

PHAM ET AL.

Examiner

Brian Goddard

Art Unit

2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 13-16 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As written, claims 13-16 depend from claims 8-11 respectively, but recite steps of a method. Claims 8-11 each recite an anti-virus program executable by a computer system, not a method. Thus, claims 13-16 are indefinite for depending upon a non-existent method (the claims lack antecedent basis completely).

Claim 18 depends from claim 13 as written, and is therefore indefinite for the same reasons. Further claim 18 lacks appropriate antecedent basis for the limitations "the start marker" and "the end marker" in the second line of the claim.

In the interest of compact prosecution, the examiner assumes that claims 13-18 should depend from claims 12-17 respectively, as this provides appropriate antecedent basis for each of these claims, and corresponds to the patterns of matching claims 20-25 and 27-32.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-32 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,960,170 to Chen et al.

Referring to claim 1, Chen discloses an anti-virus program executable by a computer system as claimed. See Figures 1-5 and the corresponding portions of Chen's specification for this disclosure. Chen teaches "an anti-virus program [450] executable by a computer system [See Figs. 1-3] comprising:

virus scanning routines [454] operable to scan a file and detect a virus;

virus removal routines [460] operable to remove the detected virus from the file, the virus removal routines comprising a text editor [treatment object / remedial routine], operable to search [scan for cleaning patterns (See disclosure of Cleaning Module and Cleaning Pattern Module)] and modify a textual portion [stripping out or replacing infected portions (See column 15, line 54 et seq.)) of the file under control of virus removal instructions; and

the virus removal instructions [458 & 462], which are operable to cause the text editor to remove a virus from the textual portion of the file" as claimed.

Referring to claims 2-3, Chen discloses the anti-virus program as claimed. See Columns 13-14 of Chen's specification for the details of this disclosure. Chen teaches the anti-virus program of claim 1, as above, wherein the removed virus is located on

one line of text [single, string-by-string match for signature (See 'first type of detection')], or on a plurality of lines of text [string matching for adjacent portions (See 'second type of detection')] as claimed.

Referring to claim 4, Chen discloses the anti-virus program as claimed. See Figure 4 and the corresponding portions of Chen's specification for this disclosure. Chen teaches the anti-virus program of claim 1, as above, wherein the text editor comprises a search function [remedial scanning function] operable to search a textual portion of a file using a regular expression [strings making up the signatures] specifying a pattern [See 462] of text [strings] to be matched [as with the detection scanning functions (See Columns 13-15)] as claimed.

Referring to claim 5, Chen discloses the anti-virus program as claimed. See Figure 4 and the corresponding portions of Chen's specification for this disclosure. Chen teaches the anti-virus program of claim 4, as above, wherein the text editor comprises a mark function ['marker'] operable to mark text matching the regular expression that was found by the search function [See Column 14, lines 32-48] as claimed.

Referring to claim 6, Chen discloses the anti-virus program as claimed. See Figure 4 and the corresponding portions of Chen's specification for this disclosure. Chen teaches the anti-virus program of claim 5, as above, wherein the text editor comprises a delete function [See e.g. Column 15, line 54 et seq.] operable to delete text marked by the mark function ['stripping out infected portions'] as claimed.

Claims 7 and 8 are rejected on the same basis as claims 5 and 6 respectively. Chen's marker function marks the infected signature portion of the file and deletes it as claimed.

Claims 9 and 10 are rejected on the same basis as claims 2 and 3 respectively, in light of the basis for claim 8. See the discussions regarding claims 1-3 and 8 for the details of this disclosure.

Claim 11 is rejected on the same basis as claim 8. See the discussions regarding claims 1 and 4-8 for the details of this disclosure.

Referring to claim 12, Chen discloses the method for removing a virus from a textual portion of a file infected with a virus as claimed. See the discussions regarding claims 1 and 4-6 above for the details of this disclosure. Chen teaches a method [See Figs. 2 & 5] for removing a virus from a textual portion of a file infected with a virus [See above], comprising the steps of:

- loading the infected file [See Steps 250-260 and 590-625];
- searching the infected file to locate text associated with the virus [See claim 1 above];
- marking the located text [See claim 5 above]; and
- deleting the marked text [See claim 6 above] as claimed.

Claim 13 is rejected on the same basis as claim 4, in light of the basis for claim 12. See the discussions regarding claims 1, 4-6 and 12 above for the details of this disclosure.

Claims 14-18 are rejected on the same basis as claim 11, in light of the basis for claims 12-13. See the discussions regarding claims 1, 4-6 and 11-13 above for the details of this disclosure.

Claims 19-25 are rejected on the same basis as claims 12-18 respectively. See the discussions regarding claims 12-18 above for the details of this disclosure.

Claims 26-32 are rejected on the same basis as claims 12-18 respectively. See the discussions regarding claims 12-18 above for the details of this disclosure.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

U.S. Patent No. 5,889,943 to Ji et al. and U.S. Patent Application Publication No. 2003/0046558 to Teblyashkin et al. are each considered particularly pertinent to applicants' claimed invention.

The remaining prior art of record is considered pertinent to applicants' disclosure, and/or portions of applicants' claimed invention.


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goddard whose telephone number is 703-305-7821. The examiner can normally be reached on M-F, 9 AM - 5 PM.

Art Unit: 2171

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bdg
30 April 2004



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